Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for combining at least two adjacent image segments to form a larger composite image comprising:

establishing a first region of a photosensitive coated substrate in which a first image segment will be printed;

establishing a second region of the photosensitive coated substrate in which a second image segment will be printed;

defining a buffer region associated with both image segments;

printing, with a printing device, the first image segment and the buffer region onto a first area of the photosensitive coated substrate;

modifying the intensity in the buffer region by a first ramp value;

moving at least one of the printing device and the photosensitive coated substrate relative to one another to print a second area of the photosensitive coated substrate;

printing, with the printing device, the second image segment and the buffer region onto the second area of the photosensitive coated substrate; and

modifying the intensity in the buffer region by a second ramp value.

2. (Original) A method according to claim 1 wherein the image segments are substantially overlapping in the buffer region.

3. (Original) A method according to claim 1 wherein the first ramp rate and the second ramp rate are opposite one another.

4. (Original) A method according to claim 1 wherein the intensity in the buffer region sums to substantially full scale.

5. (Original) A method according to claim 1 wherein the buffer region is represented by a number of pixels from the first image segment and a number of pixels from the second image segment.

6. (Currently Amended) A method according to claim 1 wherein ~~the printing is done through use of a photosensitive medium and~~ intensity in the buffer region is modified by modulating the amplitude of a beam of electromagnetic radiation capable of exposing a photosensitive ~~medium~~ coated substrate.

7. (Original) A method according to claim 6 wherein the intensity in the buffer region is modified by modulating the amplitude of a beam of light.

8. (Original) A method according to claim 6 wherein the intensity in the buffer region is modified by modulating the amplitude of a laser beam.

9. (Original) A method according to claim 6 wherein the amplitude of the beam is modified by external modulation.

10. (Original) A method according to claim 6 wherein the amplitude of the beam is modified by internal modulation.

11. (Original) A method according to claim 6 wherein the amplitude of the beam is modified by acoustic modulation.

12. (Original) A method according to claim 11 wherein the amplitude of the beam is modified by an Acousto-Optic Modulator.

13. (Currently Amended) A method according to claim 1 wherein the printing of the first and second image segments is achieved through a process selected from the group consisting of scanning a photosensitive ~~medium~~ coated substrate by a rotating polygon, rotating single facet mirror or rotating holographic scanner illuminated by the exposing radiation source.

14. (Currently Amended) A method according to claim 1 wherein the printing of the first and second image segments is achieved through having a photosensitive ~~medium~~ coated substrate exposed by a fixed pattern array of individually segmented light sources.

15. (Original) A method according to claim 14 wherein the printing of the first and second image segments uses a laser beam.

16. (Original) A method according to claim 14 wherein the printing of the first and second image segments uses light valves illuminated by a light source.

17. (Original) A method according to claim 14 wherein the printing of the first and second image segments uses micro-mirrors illuminated by a light source.

18. (Currently Amended) A method according to claim 1 wherein the printing of the first and second image segments is achieved through having a photosensitive ~~medium~~ coated substrate exposed by a fixed pattern array of radiation sources.

19. (Currently Amended) A method for creating a buffer region for a composite image comprising:

defining the region as a number of pixels extending into any two adjacent image segments;

defining a first rate at which the intensity of the pixels in the buffer region will be attenuated across the region in printing, with a printing device, a first image segment onto a first area of a photosensitive coated substrate; and

defining a second rate at which the intensity of the pixels in the buffer region will be attenuated across the region in printing, with the printing device, a second image segment onto a second area of the photosensitive coated substrate after moving at least one of the printing device and the photosensitive coated substrate relative to one another.

20. (Original) A method according to claim 19 wherein the first rate and the second rate at which the intensity of the pixels is attenuated are opposite one another.

21. (Original) A method according to claim 19 wherein the intensity of the pixels in the buffer region sum to substantially full scale.

22. (Currently Amended) A printing system comprising:

a pixel counter;

an integrator which outputs an intensity value ~~from an input ramp rate and an initial value~~ in a buffer region according to an initial value for the intensity value and a ramp rate that defines a change in the intensity value from the initial value;

a multiplier which converts digital pixel data and ~~an~~ the intensity value into analog data; ~~and~~

an intensity modulator which modulates electromagnetic radiation in accordance with the analog data; and

a printing device which prints a first image segment defined by the electromagnetic radiation onto a first area of a photosensitive coated substrate and, after moving at least one of the printing device and the photosensitive coated substrate relative to one another, prints a second image segment defined by the electromagnetic radiation onto a second area of the photosensitive coated substrate.

23. (Original) A printing system according to claim 22 wherein the intensity modulator is an amplitude modulator.

24. (Original) A printing system according to claim 23 wherein the amplitude modulator is an Acousto-Optic Modulator (AOM).

25. (Original) A printing system according to claim 22 wherein the intensity modulator is a phase modulator.

26. (Original) A printing system according to claim 22 wherein the intensity modulator is a frequency modulator.

27. (Original) A printing system according to claim 22 wherein the intensity modulator is a code domain modulator.

28. (Currently Amended) A printing system comprising:

means for counting pixels;

means for computing an intensity value ~~from a ramp rate and an initial value~~ in a buffer region according to an initial value for the intensity value and a ramp rate that defines a change in the intensity value from the initial value;

means for converting ~~an~~ the intensity value and digital pixel data into analog data;

~~and~~ means for modulating intensity of electromagnetic radiation in accordance with the analog data; and

printing means for printing a first image segment defined by the electromagnetic radiation onto a first area of a photosensitive coated substrate and, after moving at least one of the printing device and the photosensitive coated substrate relative to one another, printing a second image segment defined by the electromagnetic radiation onto a second area of the photosensitive coated substrate.

29. (Original) A printing system according to claim 28 wherein the ramp rate is defined as the percentage of modulation per in-scan pixel.

30. (Original) A printing system according to claim 28 wherein the intensity value is computed from a ramp rate and an initial value by an integrator.

31. (Original) A printing system according to claim 28 wherein the intensity value and digital pixel data are converted into analog data by a multiplier.

32. (Original) A printing system according to claim 28 wherein a means for modulating intensity is amplitude modulation.

33. (Original) A printing system according to claim 32 wherein the amplitude modulation is accomplished by an Acousto-Optic Modulator.

34. (Original) A printing system according to claim 28 wherein the means for modulating intensity is phase modulation.

35. (Original) A printing system according to claim 28 wherein the means for modulating intensity is frequency modulation.

36. (Original) A printing system according to claim 28 wherein the means for modulating intensity is code domain modulation.

37. (New) A method according to claim 1 wherein the photosensitive coated substrate comprises a printing plate or drum.